

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is identified in the ensuing listing of the claims. This listing of the claims replaces all previously submitted claims listings.

1. (Currently amended) A dry etchant, consisting essentially of:
a first component with the general formula $C_2H_xF_y$, where x is an integer from 3 to 5, inclusive, y is an integer from 1 to 3, inclusive, and $x + y = 6$; and
a second component consisting of at least one fluorocarbon,
~~said~~the dry etchant being formulated to etch doped silicon dioxide with selectivity over at least undoped silicon dioxide.
2. (Original) The dry etchant of claim 1, also being formulated to etch doped silicon dioxide with selectivity over silicon nitride.
3. (Canceled)
4. (Currently amended) The dry etchant of claim 1, wherein ~~said~~the first component is a primary etchant.
5. (Currently amended) The dry etchant of claim 4, wherein ~~said~~the second component is an additive.
6. (Canceled)
7. (Currently amended) The dry etchant of claim 1, wherein ~~said~~the second component consists of at least one fluorocarbon having at least as many hydrogen atoms as fluorine atoms.

8. (Currently amended) The dry etchant of claim 7, wherein ~~said~~the at least one fluorocarbon comprises at least one of CH_2F_2 and CH_3F .
9. (Currently amended) The dry etchant of claim 1, wherein ~~said~~the fluorocarbon comprises at least one of CF_4 and CHF_3 .
10. (Currently amended) The dry etchant of claim 5, wherein ~~said~~the additive increases a rate with which ~~said~~the dry etchant etches doped silicon dioxide over a rate at which ~~said~~the first component alone etches doped silicon dioxide.
11. (Currently amended) The dry etchant of claim 10, wherein ~~said~~the additive comprises at least one of CF_4 and CHF_3 .
12. (Currently amended) The dry etchant of claim 5, wherein ~~said~~the additive increases a selectivity with which ~~said~~the first component etches doped silicon oxide over at least undoped silicon dioxide over ~~said~~the selectivity of ~~said~~the first component alone.
13. (Currently amended) The dry etchant of claim 12, wherein ~~said~~the additive comprises at least one of CH_2F_2 and CH_3F .
14. (Currently amended) The dry etchant of claim 5, wherein ~~said~~the additive increases a selectivity of ~~said~~the first component for one type of doped silicon dioxide over another type of doped silicon dioxide over ~~said~~the selectivity of ~~said~~the first component alone.
15. (Currently amended) The dry etchant of claim 1, wherein ~~said~~the first component comprises an additive and ~~said~~the second component comprises a primary etchant.
16. (Currently amended) The dry etchant of claim 15, wherein ~~said~~the primary etchant comprises at least one of CF_4 and CHF_3 .

17. (Currently amended) The dry etchant of claim 15, wherein a combination of ~~said~~the first component and ~~said~~the primary etchant etches doped silicon dioxide with greater selectivity over at least undoped silicon dioxide than a selectively of ~~said~~the primary etchant alone.

18. (Currently amended) The dry etchant of claim 15, wherein a combination of ~~said~~the first component and ~~said~~the primary etchant etches doped silicon dioxide at substantially a same rate as an etchant that includes ~~said~~the primary etchant but not ~~said~~the first component etches doped silicon dioxide.

19. (Currently amended) The dry etchant of claim 1, wherein relative concentrations of ~~said~~the first component and ~~said~~the second component are tailored to provide for at least one of a particular etch selectivity of doped silicon dioxide over undoped silicon dioxide, a particular etch selectivity of doped silicon dioxide over silicon nitride, and a particular etch rate of doped silicon dioxide.

20. (Currently amended) A dry etchant consisting essentially of at least one fluorocarbon, ~~said~~the at least one fluorocarbon comprising a component with the general formula $C_2H_xF_y$, where x is an integer from 3 to 5, inclusive, y is an integer from 1 to 3, inclusive, and $x + y = 6$, ~~said~~the dry etchant being formulated to etch doped silicon dioxide at a faster rate than at least undoped silicon dioxide.

21. (Original) The dry etchant of claim 20, also being formulated to etch doped silicon dioxide at a faster rate than silicon nitride.

22. (Original) The dry etchant of claim 20, including a combination of components.

23. (Currently amended) The dry etchant of claim 22, wherein ~~said~~the component is a primary etchant.
24. (Original) The dry etchant of claim 23, further comprising an additive.
25. (Currently amended) The dry etchant of claim 24, wherein ~~said~~the additive comprises a halogenated carbon dry etchant material.
26. (Currently amended) The dry etchant of claim 24, wherein ~~said~~the additive comprises a fluorocarbon having at least as many hydrogen atoms as fluorine atoms.
27. (Currently amended) The dry etchant of claim 26, wherein ~~said~~the fluorocarbon comprises at least one of CH_2F_2 and CH_3F .
28. (Currently amended) The dry etchant of claim 24, wherein ~~said~~the additive comprises at least one of CF_4 and CHF_3 .
29. (Currently amended) The dry etchant of claim 23, wherein ~~said~~the additive increases a rate with which ~~said~~the dry etchant etches doped silicon dioxide over a rate at which ~~said~~the component alone etches doped silicon dioxide.
30. (Currently amended) The dry etchant of claim 29, wherein ~~said~~the additive comprises at least one of CF_4 and CHF_3 .
31. (Currently amended) The dry etchant of claim 23, wherein ~~said~~the additive increases a selectivity with which ~~said~~the dry etchant etches doped silicon oxide over at least undoped silicon dioxide over ~~said~~the selectivity of ~~said~~the component alone.

32. (Currently amended) The dry etchant of claim 31, wherein ~~said~~the additive comprises at least one of CH_2F_2 and CH_3F .

33. (Currently amended) The dry etchant of claim 23, wherein ~~said~~the additive increases a selectivity of ~~said~~the dry etchant for one type of doped silicon dioxide over another type of silicon dioxide over ~~said~~the selectivity of ~~said~~the component alone.

34. (Currently amended) The dry etchant of claim 22, wherein ~~said~~the component comprises an additive for use with another, primary etchant.

35. (Currently amended) The dry etchant of claim 34, wherein ~~said~~the primary etchant comprises at least one of CF_4 and CHF_3 .

36. (Currently amended) The dry etchant of claim 34, wherein ~~said~~the combination of ~~said~~the component and ~~said~~the primary etchant etches doped silicon dioxide with greater selectivity over at least undoped silicon dioxide than a selectivity of ~~said~~the primary etchant alone.

37. (Currently amended) The dry etchant of claim 34, wherein ~~said~~the combination of ~~said~~the component and ~~said~~the primary etchant etches doped silicon dioxide at a substantially normal rate.

38. (Currently amended) The dry etchant of claim 22, wherein relative concentrations of ~~said~~the component and ~~said~~the primary etchant in ~~said~~the combination are tailored to provide for at least one of a particular etch selectivity of doped silicon dioxide over undoped silicon dioxide, a particular etch selectivity of doped silicon dioxide over silicon nitride, and a particular etch rate of doped silicon dioxide.

39. (Currently amended) The dry etchant of claim 1, wherein ~~said~~the first component comprises up to about 65% of a total gas flow of the dry etchant.

40. (Currently amended) The dry etchant of claim 1, wherein ~~said~~the first component comprises up to about 40% of a total gas flow of the dry etchant.

41. (Currently amended) The dry etchant of claim 40, wherein ~~said~~the second component comprises up to about 60% of ~~said~~the total gas flow.

42. (Previously presented) The dry etchant of claim 1, further including at least one carrier gas.

43. (Currently amended) The dry etchant of claim 20, wherein ~~said~~the component comprises up to about 65% of a total gas flow of the dry etchant.

44. (Currently amended) The dry etchant of claim 20, wherein ~~said~~the component comprises up to about 40% of a total gas flow of the dry etchant.

45. (Currently amended) The dry etchant of claim 43, wherein at least one other component comprises up to about 60% of ~~said~~the total gas flow.

46. (Previously presented) The dry etchant of claim 20, further including at least one carrier gas.